

CLAIM AMENDMENTS

1. to 45. **(Canceled)**

46. **(Currently amended)** ~~The method of claim 43, wherein the protein has~~

A method for treating arthritis or reducing inflammation in a subject, comprising administering to the subject a protein having at least one of the following properties:

a) it comprises the amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:8;

b) it comprises the amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:9; or

c) it comprises a consecutive amino acid sequence that is at least 80% identical to a) or b) (or fragment thereof) which causes cleavage of TNF receptor from human cells in which TNF receptor is expressed.

47. **(Canceled)**

48. **(Currently amended)** The method of ~~claim 47~~ claim 46, whereby the subject is treated for sepsis.

49. **(Currently amended)** The method of ~~claim 47~~ claim 46, whereby the subject is treated for arthritis.

50. **(Previously Presented)** The method of claim 49, whereby the subject is treated for rheumatoid arthritis.

51. **(Currently amended)** The method of ~~claim 47~~ claim 46, wherein the protein comprises an amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:8.

52. **(Currently amended)** The method of ~~claim 47~~ **claim 46**, wherein the protein comprises a fragment of the amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:8, which causes cleavage of TNF receptor from human cells in which TNF receptor is expressed.

53. **(Currently amended)** The method of ~~claim 47~~ **claim 46**, wherein the protein comprises a consecutive sequence that is at least 80% identical to the amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:8 (or fragment thereof), which causes cleavage of TNF receptor from human cells in which TNF receptor is expressed.

54. **(Currently amended)** The method of ~~claim 47~~ **claim 46**, wherein the protein comprises a consecutive sequence that is at least 95% identical to the amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:8 (or fragment thereof), which causes cleavage of TNF receptor from human cells in which TNF receptor is expressed.

55. **(Currently amended)** The method of ~~claim 47~~ **claim 46**, wherein the protein is a metalloprotease.

56. **(Previously Presented)** The method of ~~claim 47~~ **claim 46**, wherein the protein causes cleavage of the human p55 TNF receptor.

57. **(Previously Presented)** A method for treating arthritis or reducing inflammation in a subject, comprising administering to the subject a protein having at least one of the following properties:

a) it comprises an amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:9; or

b) it comprises a consecutive amino acid sequence that is at least 80% identical to a) (or fragment thereof) which causes cleavage of TNF receptor from human cells in which TNF receptor is expressed.

58. **(Previously Presented)** The method of claim 57, whereby the subject is treated for sepsis.

59. **(Previously Presented)** The method of claim 57, whereby the subject is treated for arthritis.

60. **(Previously Presented)** The method of claim 59, whereby the subject is treated for rheumatoid arthritis.

61. **(Previously Presented)** The method of claim 57, wherein the protein comprises an amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:9.

62. **(Previously Presented)** The method of claim 57, wherein the protein comprises a fragment of the amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:9, which causes cleavage of TNF receptor from human cells in which TNF receptor is expressed.

63. **(Previously Presented)** The method of claim 57, wherein the protein comprises a consecutive sequence that is at least 80% identical to the amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:9 (or fragment thereof), which causes cleavage of TNF receptor from human cells in which TNF receptor is expressed.

64. **(Previously Presented)** The method of claim 57, wherein the protein comprises a consecutive sequence that is at least 95% identical to the amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:9 (or fragment thereof), which causes cleavage of TNF receptor from human cells in which TNF receptor is expressed.

65. **(Canceled)**

66. **(Previously Presented)** The method of claim 57, wherein the protein causes cleavage of the human p55 TNF receptor.

67. **(Withdrawn)** A pharmaceutical composition comprising a protein formulated in an excipient for ~~administration to~~ treating arthritis or reducing inflammation in a human patient, wherein the protein has at least one of the following properties:

a) it comprises the amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:8;

b) it comprises the amino acid sequence encoded in the longest open reading frame of SEQ. ID NO:9;

c) it comprises a consecutive amino acid sequence that is at least 80% identical to a) or b) (or fragment thereof) which causes cleavage of TNF receptor from human cells in which TNF receptor is expressed.

68. **(Withdrawn)** The pharmaceutical composition of ~~claim 64~~ **claim 67**, packaged in a kit with instructions for treating arthritis.

69. **(Withdrawn)** The pharmaceutical composition of ~~claim 64~~ **claim 67**, packaged in a kit with instructions for reducing inflammation.

70. **(Currently amended)** The method of ~~claim 47~~ **claim 46**, whereby the subject is treated for multiple sclerosis.

71. **(Currently amended)** The method of ~~claim 47~~ **claim 46**, whereby the subject is treated for sepsis.

72. **(Previously Presented)** The method of claim 57, whereby the subject is treated for multiple sclerosis.

73. **(Previously Presented)** The method of claim 57, whereby the subject is treated for sepsis.

74. **(Withdrawn)** The pharmaceutical composition of ~~claim 64~~ **claim 67**, packaged in a kit with instructions for treating multiple sclerosis.

75. **(Withdrawn)** The pharmaceutical composition of ~~claim 64~~ **claim 67**, packaged in a kit with instructions for treating sepsis.

76. **(New)** A method for treating arthritis or reducing inflammation in a subject, comprising administering to the subject a protein containing the amino acid sequence encoded in SEQ. ID NO:8.

77. **(New)** The method of claim 76, wherein the protein causes cleavage of the human p55 TNF receptor.

78. **(New)** The method of claim 76 whereby the subject is treated for sepsis.

79. **(New)** The method of claim 76 whereby the subject is treated for arthritis.

80. **(New)** The method of claim 76, whereby the subject is treated for rheumatoid arthritis.

81. **(New)** The method of claim 76, whereby the subject is treated for multiple sclerosis.

82. **(New)** A method for treating arthritis or reducing inflammation in a subject, comprising administering to the subject a protein containing the amino acid sequence encoded in SEQ. ID NO:9.

83. **(New)** The method of claim 82, wherein the protein causes cleavage of the human p55 TNF receptor.

84. **(New)** The method of claim 82 whereby the subject is treated for sepsis.

85. **(New)** The method of claim 82 whereby the subject is treated for arthritis.

86. **(New)** The method of claim 82, whereby the subject is treated for rheumatoid arthritis.

87. **(New)** The method of claim 82, whereby the subject is treated for multiple sclerosis.